

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claims 1-21 (canceled).

Claim 22 (new): A remote education system that enables education over distances using multimedia bi-directional communication, including video and audio, the remote education system comprising:

student video acquisition means for acquiring video of the student;

facial image matching means for matching the video acquired by the student video acquisition means with a pre-registered facial image of the student;

action request means for requesting the student to perform an action to change an appearance of the body of the student; and

action detection means for detecting image changes of the student corresponding to the action requested by the action request means based on the video of the student acquired by the student video acquisition means, thereby providing the system with a function for confirming that the legitimate student is in attendance.

Claim 23 (new): The remote education system according to claim 22, wherein the action request means includes a function for requesting that the student moves the position of his or her face, and the action detection means includes a function for detecting whether the position of the face of the student has moved.

Claim 24 (new): The remote education system according to claim 22, wherein the action request means includes a function for asking the student a question and requesting an audio response, and the action detection means includes:

a function for acquiring audio of the student;

a function for recognizing the audio response from the acquired audio;

a function for determining the validity of the audio response of the student from the recognized audio response; and

a function for detecting movement of the mouth of the student accompanying the audio response by the student.

Claim 25 (new): The remote education system according to claim 24, wherein the action detection means includes a function for matching the audio response of the student with pre-registered audio of the student.

Claim 26 (new): The remote education system according to claim 24, wherein the action request means includes a function for asking the student a question relating to time and requesting an audio response, and the action detection means includes a function for determining the validity of the time given in response by the student.

Claim 27 (new): The remote education system according to claim 24, wherein the action request means includes a function for asking a question relating to personal information of the student and requesting an audio response, and the action detection means includes a function for matching the personal information given in response by the student with pre-registered personal information relating to that student.

Claim 28 (new): The remote education system according to claim 22, wherein the action detection means includes a function for determining that the facial image of the student does not move in a discontinuous manner.

Claim 29 (new): The remote education system according to claim 22, wherein the action detection means has a function for determining whether image changes occur within a specified time of the action request means requesting the student to perform an action.

Claim 30 (new): The remote education system according to claim 22, wherein the action request means has a function for using unpredictable timing when requesting the student to perform an action.

Claim 31 (new): The remote education system according to claim 22, wherein the action request means has a function for requesting the student to perform an action based on a command by the lecturer.

Claim 32 (new): An attendance confirmation method of confirming whether a legitimate student is in attendance in a remote education setting, the method comprising the steps of:

- acquiring video of the student;
- matching the acquired video with a pre-registered facial image of the student;
- requesting the student to perform an action to change the appearance of the body of the student; and
- detecting image changes of the student corresponding to the requested action based on acquired video of the student.

Claim 33 (new): The attendance confirmation method according to claim 32, wherein the step of requesting an action includes a step of requesting the student to move the position of his or her face, and the step of detecting the action includes a step of detecting whether the position of the face of the student has moved.

Claim 34 (new): The attendance confirmation method according to claim 32, wherein the step of requesting an action includes a step of asking the student a question and requesting an audio response, and the step of detecting the action includes:

- a step of acquiring audio of the student;
- a step of performing recognition of the audio response from the acquired audio;

a step of determining the validity of the audio response of the student from the recognized audio response; and

a step of detecting movement of the mouth of the student accompanying the audio response of the student.

Claim 35 (new): The attendance confirmation method according to claim 34, wherein the step of detecting the action includes a step of matching the audio response of the student with pre-registered audio of the student.

Claim 36 (new): The attendance confirmation method according to claim 34, wherein the step of requesting an action includes a step of asking the student a question relating to time and requesting an audio response, and the step of detecting the action includes a step of determining the validity of the time given in response by the student.

Claim 37 (new): The attendance confirmation method according to claim 34, wherein the step of requesting an action includes a step of asking a question relating to personal information of the student and requesting an audio response, and the step of detecting the action includes a step of matching the personal information given in response by the student with pre-registered personal information relating to that student.

Claim 38 (new): The attendance confirmation method according to claim 32, wherein the step of detecting the action includes a step of determining that the facial image of the student does not move in a discontinuous manner.

Claim 39 (new): The attendance confirmation method according to claim 32, wherein the step of detecting the action has a step of determining whether image changes occur within a specified time from requesting the student to perform an action by the step of requesting an action.

Claim 40 (new): The attendance confirmation method according to claim 32, wherein the step of requesting an action uses unpredictable timing when requesting the student to perform an action.

Claim 41 (new): The attendance confirmation method according to claim 32, wherein the step of requesting an action requests the student to perform an action, based on a command by the lecturer.

Claim 42 (new): A computer-readable medium having computer-executable instructions for performing the attendance confirmation method according to claim 32.